

**DIRECT TESTIMONY OF
FELICIA D. HOWARD
ON BEHALF OF
SOUTH CAROLINA ELECTRIC & GAS COMPANY
DOCKET NO. 2014-5-G**

1 **Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND POSITION.**

2 A. My name is Felicia D. Howard and my business address is 220 Operation
3 Way, Cayce, South Carolina. I am the Vice President of Gas Operations for South
4 Carolina Electric & Gas Company ("SCE&G" or the "Company").
5

6 **Q. DESCRIBE YOUR EDUCATIONAL BACKGROUND AND BUSINESS**
7 **BACKGROUND.**

8 A. I have a Bachelor of Science Degree in Electrical and Computer
9 Engineering and a Master of Business Administration Degree from the University
10 of South Carolina. Prior to joining SCE&G, I worked with Westinghouse Electric
11 Corporation in Asheville, North Carolina, where I provided technical support for
12 sales and marketing of equipment for electrical generators. In addition, I held other
13 positions with Westinghouse's Distribution and Control Business Unit in product
14 engineering, quality engineering, and technical sales in Sumter and Charleston,
15 South Carolina, and Charlotte, North Carolina.

16 I joined SCE&G in 1992 as a Quality Advisor for process improvement
17 efforts in the Fossil/Hydro Business Unit. During my tenure with SCE&G and
18 SCE&G's parent company, SCANA Corporation ("SCANA"), I also worked as a

1 Key Account Manager for SCE&G's largest industrial customers; Manager of
2 Community/Economic Development and Local Government; and Director of
3 Demand Side Management. In February 2013, I assumed my current position as
4 Vice President of Gas Operations for SCE&G.

5
6 **Q. HAVE YOU PREVIOUSLY APPEARED BEFORE THE PUBLIC**
7 **SERVICE COMMISSION OF SOUTH CAROLINA ("COMMISSION")?**

8 A. Yes. I have appeared before the Commission previously.

9
10 **Q. WHAT ARE YOUR DUTIES AS VICE PRESIDENT OF GAS**
11 **OPERATIONS?**

12 A. My corporate responsibilities include, among other things, oversight of the
13 daily operations of SCE&G's natural gas distribution system, including
14 maintenance, construction, and gas sales. I also am responsible for the overall
15 reliability of the system, which includes ensuring that the system is capable of
16 providing safe and reliable service to our customers.

17
18 **Q. PLEASE DESCRIBE THE PURPOSE OF YOUR TESTIMONY.**

19 A. The purpose of my testimony is to provide the Commission with an overview
20 of SCE&G's gas purchasing practices for the period under review, August 1, 2013,
21 through July 31, 2014 ("Review Period"). I will describe SCE&G's natural gas
22 distribution system from an operations standpoint and discuss the primary

1 facilities that comprise the system, including the capacity of the system for serving
2 SCE&G's customers. I also will discuss the construction projects in which
3 SCE&G is engaged that are designed to increase the capacity, reliability, and
4 operational flexibility of SCE&G's system.

5
6 **I. PURCHASED GAS ADJUSTMENT PROCEEDING**

7 **Q. WHAT IS THE PURPOSE OF THIS PURCHASED GAS ADJUSTMENT**
8 **("PGA") PROCEEDING?**

9 A. By Order No. 87-898, dated August 14, 1987, the Commission instituted an
10 annual PGA review of SCE&G's gas purchasing policies and practices. These
11 PGA reviews are conducted to determine the prudence of SCE&G's gas
12 purchasing policies and practices during the period under review and to determine
13 if SCE&G properly applied its tariffs in recovering its gas costs.

14 It is worth noting that in every PGA review, the Commission has found that
15 SCE&G's gas purchasing policies and practices were prudent and that the
16 Company properly adhered to the gas cost recovery provisions of its gas tariffs
17 and applicable Commission directives and orders.

18 In this PGA proceeding, the Company will provide testimony from
19 personnel who implement SCE&G's gas purchasing practices and policies and
20 who address tariff issues on a day-to-day basis. Their testimony specifically relates
21 to the Review Period. Rose M. Jackson, General Manager – Supply & Asset
22 Management, explains SCE&G's gas purchasing practices, gas supply and

1 interstate pipeline capacity. Rachel M. Robinson, Lead Analyst in SCANA
2 Services, Inc.'s Gas Rates and Regulatory Accounting Department, discusses the
3 PGA methodology for recovering the cost of gas implemented by the Company
4 pursuant to Commission Order Nos. 2006-679 and 2009-910.
5

6 **Q. PLEASE PROVIDE AN OVERVIEW OF SCE&G'S GAS PURCHASING**
7 **PRACTICES FOR THE REVIEW PERIOD.**

8 **A.** SCE&G's management analyzes and considers the supply and interstate
9 capacity assets of its business on an on-going basis in order to provide safe,
10 reliable, and economical natural gas service in South Carolina. All of the variables
11 related to the growth in our state and the demand on SCE&G's system must be
12 balanced with corresponding supply and capacity needs. Finally, I want to
13 emphasize to the Commission that the Company procured reliable and reasonably
14 priced natural gas supplies during the Review Period.
15

16 **II. SCE&G'S NATURAL GAS DISTRIBUTION SYSTEM**

17 **Q. PLEASE DESCRIBE SCE&G'S NATURAL GAS SYSTEM FROM AN**
18 **OPERATIONS STANDPOINT.**

19 **A.** As of December 31, 2013, SCE&G's natural gas distribution system
20 consisted of more than 9,241 miles of pipeline which includes approximately
21 8,794 miles of distribution mains and 447 miles of transmission mains. SCE&G's

1 natural gas system also consisted of more than 367,000 service lines which extend
2 from the Company distribution and transmission mains. The Company's pipeline
3 facilities range in diameter from ½-inch distribution pipe to 20-inch transmission
4 pipe and carry natural gas under pressures typically ranging from 25 pounds per
5 square inch gauge ("psig") to 1,100 psig in order to deliver safe and reliable
6 natural gas service to approximately 332,000 factories, businesses, and homes in
7 South Carolina, as of the end of the Review Period. SCE&G currently provides
8 natural gas service in all or part of 36 of the 46 counties in South Carolina
9 covering approximately 23,000 square miles.

10
11 **Q. WHAT LIQUEFIED NATURAL GAS ("LNG") FACILITIES DOES**
12 **SCE&G OPERATE?**

13 **A.** SCE&G owns and operates two LNG facilities. These facilities are located
14 at Bushy Park near North Charleston and at Salley in western Orangeburg County.
15 The LNG facilities allow SCE&G to store natural gas in liquid form and
16 revaporize it back into the pipeline when necessary. SCE&G primarily dispatches
17 its LNG to help meet high demand and to serve as a backup supply of gas in
18 emergency situations.

19
20 **Q. WHAT ARE THE CAPACITIES OF THE LNG FACILITIES?**

21 **A.** The Bushy Park facility has the capability of converting natural gas into a
22 liquid, a process known as liquefaction. It can store up to 980 million cubic feet of

1 LNG. The Salley facility has the capability of storing up to 900 million cubic feet
2 of trucked-in LNG. LNG must be transported to Salley via truck because Salley
3 does not possess the ability to liquefy natural gas.

4
5 **Q. PLEASE DISCUSS THE EFFECTS OF THE 2013 – 2014 WINTER ON**
6 **THE COMPANY'S SYSTEM.**

7 A. The 2013 – 2014 winter was extremely cold. In fact, the 2013 – 2014
8 winter was approximately 9.2% colder (as measured by heating degree days) when
9 compared to the 2012 – 2013 winter, primarily because of the "Polar Vortex"
10 events that brought significant Arctic air masses deep into the southern latitudes.
11 These Polar Vortex events caused the 2013 – 2014 winter season to experience
12 fluctuations between very cold weather and warm weather. In spite of the
13 extremely cold weather, SCE&G's natural gas system functioned as designed by
14 providing a continuous, uninterrupted supply of natural gas to our firm customers'
15 homes and businesses. However, the Polar Vortex events did require SCE&G to
16 temporarily curtail natural gas service to certain interruptible customers at various
17 times during the winter season.

18
19 **Q. DID THE COLD TEMPERATURES IMPACT NATURAL GAS USAGE**
20 **DURING THE REVIEW PERIOD?**

21 A. Yes. The overall volume of natural gas consumed by SCE&G's customers
22 during the Review Period increased due in large part to the extremely cold winter.

1 When comparing the 2013 – 2014 winter to the 2012 – 2013 winter, natural gas
2 usage increased across all firm customer classes by approximately 17%.

3
4 **Q. PLEASE DISCUSS THE GROWTH ON THE COMPANY'S SYSTEM**
5 **DURING THE REVIEW PERIOD.**

6 A. During the Review Period, SCE&G continued to experience growth on its
7 gas system. Our total number of gas customers grew by approximately 2.3%.

8
9 **Q. WHAT STEPS HAS SCE&G TAKEN TO EXPAND ITS NATURAL GAS**
10 **SYSTEM DURING THE REVIEW PERIOD?**

11 A. Over the years, SCE&G has expanded its system as needed by adding
12 pipeline to reliably serve its new and existing customers and create operating
13 flexibility on its system. Expansion of the system is designed to accommodate
14 population growth throughout South Carolina. For example, during the Review
15 Period, SCE&G continued with its expansion of the Company's gas system in the
16 Saluda area by installing 7,600 feet of 4-inch pipeline and 1,760 feet of 6-inch
17 pipeline along Wheeler Circle and U.S. Highway 378. This project enabled the
18 Company to serve new industrial growth in the area, which is projected to add
19 approximately 150 jobs in Saluda County.

20 In the Sumter area, the Company installed approximately 6,000 feet of 2-
21 inch pipeline and 3,600 feet of 4-inch pipeline along Loring Mill Road to serve
22 new residential customers.

1 In the Florence area, SCE&G installed over 11,000 feet of 2-inch pipeline
2 along West Woodbine Avenue, Boxwood Avenue, and Larkspur Road to serve
3 new residential conversion customers.

4 In the Colleton County area near Walterboro, the Company installed 3,500
5 feet of cross-country 6-inch steel transmission pipeline to serve new industrial
6 growth.

7 In the Charleston area, SCE&G installed approximately 8,500 feet of 8-inch
8 pipeline along Bees Ferry Road to serve a mix of residential and commercial
9 customers. The Company also installed 6,500 feet of 4-inch pipeline in the
10 Charleston area along Brownswood Road to serve new residential customers. All
11 of these projects will improve the availability of natural gas to homes and
12 businesses in these important growth areas of SCE&G's service territory.

13
14 **Q. DID THE COMPANY UNDERTAKE ANY PROJECTS DURING THE**
15 **REVIEW PERIOD TO IMPROVE THE SAFETY, INTEGRITY, AND**
16 **RELIABILITY OF ITS NATURAL GAS SYSTEM?**

17 **A.** Yes. In addition to the system expansion, SCE&G completed a number of
18 projects to improve system safety, integrity and reliability and to address South
19 Carolina Department of Transportation ("SCDOT") highway widening projects.

20 Concerning SCE&G's transmission system, SCE&G completed various
21 additional valve/regulator station upgrades along a 12-inch transmission pipeline

1 in Charleston. The completion of this project allows this line to be traversed by an
2 inline inspection device, also known as a “smart pig.”

3 On the Company’s distribution system, SCE&G completed pipeline
4 replacements along Bacons Bridge Road in the Summerville area. This included
5 the relocation of approximately 15,500 feet of 4-inch pipeline and 2,100 feet of 2-
6 inch pipeline that is within SCDOT’s right-of-way to accommodate a road
7 widening project.

8 Over the last several years, SCE&G also has replaced vintage polyethylene
9 (“PE”) 3306 “black plastic” service lines located within its system in accordance
10 with recommendations by the Pipeline and Hazardous Materials Safety
11 Administration (“PHMSA”). During the Review Period, the Company replaced
12 approximately 2,000 of these service lines. To date, the Company has replaced
13 approximately 12,500 of the estimated 31,000 “black plastic” service lines in the
14 system and work continues on this multi-year replacement program.

15 In the Florence area, the Company completed the replacement of
16 approximately 8,500 feet of 2-inch pre-1973 low-ductile inner wall PE 2306
17 Aldyl-A (“Aldyl-A”) gas main with more modern engineered pipes. Additionally,
18 SCE&G has replaced approximately 33,000 feet of 2-inch pre-1973 Aldyl-A gas
19 main in Sumter. **As of the end of the Review Period, SCE&G has replaced all the**
20 **Aldyl-A gas main identified in the Florence area and has approximately 6,600 feet**
21 **of Aldyl-A gas main remaining to replace in Sumter, which the Company**
22 **anticipates completing by November 2014.**

1 **Q. HAVE FEDERAL PIPELINE SAFETY REGULATORS MADE ANY**
2 **RECOMMENDATIONS REGARDING THE REPLACEMENT OF CAST**
3 **IRON PIPE USED TO TRANSPORT NATURAL GAS?**

4 A. Yes. Cast iron gas mains and service lines were used for many years in
5 systems across the country to transport natural gas. Over time, however, cast iron
6 pipe showed a greater potential for leakage through joints or cracks. Beginning in
7 1991, the federal agency that is now known as PHMSA issued alert notices
8 encouraging operators of natural gas systems to implement programs to identify
9 and replace cast iron piping that may pose a public safety concern, and, in general,
10 to accelerate replacement of cast iron pipes.

11
12 **Q. WHAT STEPS HAS THE COMPANY TAKEN TO COMPLY WITH**
13 **ALERT NOTICES RELATED TO CAST IRON PIPES USED IN ITS**
14 **NATURAL GAS SYSTEM?**

15 A. In order to address this safety concern, SCE&G replaced all of the
16 identified cast iron pipe on its natural gas system with pipe made from more
17 modern materials. Accordingly, the Company no longer has any cast iron pipe
18 identified on its natural gas system.

1 **Q. PLEASE BRIEFLY DESCRIBE THE SAFETY PERFORMANCE OF**
2 **SCE&G CONCERNING ITS NATURAL GAS SYSTEM.**

3 A. As a regulated natural gas utility, SCE&G is subject to comprehensive
4 federal and state regulation. At the federal level, PHMSA, acting through the
5 Office of Pipeline Safety, has developed pipeline safety regulations over the years.
6 These pipeline safety regulations include, among other things, provisions
7 governing pipeline design, construction, testing, operations, maintenance, and
8 emergency response activities. There are also specific requirements for training
9 and qualifying personnel to work on natural gas systems, as well as additional
10 requirements for administering integrity management programs for both gas
11 transmission and distribution pipelines. The South Carolina Office of Regulatory
12 Staff monitors the Company's compliance with pipeline safety regulations.

13 SCE&G has an outstanding safety record due in large part to the
14 Company's safety-focused culture. SCE&G's highest priority is to safeguard and
15 protect those individuals who come into contact with the SCE&G system,
16 including employees, customers, and the public at-large. Moreover, the Company
17 employees who work on SCE&G's pipeline system and at the LNG facilities take
18 great pride in safety performance.

1 **Q. WHAT ARE YOU REQUESTING OF THE COMMISSION IN THIS**
2 **PROCEEDING?**

3 A. The primary commitments of SCE&G continue to be to operate our system
4 in a safe, reliable and efficient manner. Further, our employees are committed to
5 providing outstanding customer service and operational excellence. During the
6 Review Period, the Company prudently managed its business operations, which
7 included the purchase and recovery of its gas supplies and administration of the
8 PGA. Therefore, on behalf of SCE&G, I respectfully request the Commission find
9 that the Company has recovered its gas costs for the Review Period consistent
10 with its tariffs and Commission orders and that it has purchased its gas supplies
11 and administered the PGA in a prudent and reasonable manner.

12
13 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

14 A. Yes.